

MERCHANT &amp; GOULD P.C.

## United States Patent Application

## DECLARATION

As a below named inventor, we hereby declare that: our residences, post office addresses and citizenships are as stated below next to our names; that

We verily believe we are the original, first and joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled IN-SITU DETECTION OF TRANSDUCER MAGNETIC INSTABILITY IN A DISC DRIVE, the specification of which is attached hereto.

We hereby state that we have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

We acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, § 1.56 (described hereinbelow).

We hereby claim foreign priority benefits under Title 35, United States Code, § 119/365 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on the basis of which priority is claimed:

- a. ☒ no such applications have been filed.  
b. ☐ such applications have been filed as follows:

FOREIGN APPLICATION(S), IF ANY, CLAIMING PRIORITY UNDER 35 USC § 119			
COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	DATE OF ISSUE (day, month, year)

ALL FOREIGN APPLICATION(S), IF ANY, FILED BEFORE THE PRIORITY APPLICATION(S)			
COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	DATE OF ISSUE (day, month, year)

We hereby claim the benefit under Title 35, United States Code, § 120/365 of any United States and PCT international application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, we acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application.



For Continuation-in-Part (CIP) Applications, complete

U.S. APPLICATION NUMBER	DATE OF FILING (day, month, year)	STATUS (patented, pending, abandoned)

We hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below:

U.S. PROVISIONAL APPLICATION NUMBER	DATE OF FILING (Day, Month, Year)
60/311,136	9 August 2001

We hereby declare that all statements made herein of our own knowledge and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

2	<b>Full Name Of Inventor</b>	<b>Family Name</b> Schaff	<b>First Given Name</b> Michael	<b>Second Given Name</b> D.
0	<b>Residence &amp; Citizenship</b>	<b>City</b> Longmont	<b>State or Foreign Country</b> CO	<b>Country of Citizenship</b> USA
1	<b>Post Office Address</b>	<b>Post Office Address</b> 2115 Sand Dollar Circle	<b>City</b> Longmont	<b>State &amp; Zip Code/Country</b> CO 80503/USA
<b>Signature of Inventor 201:</b> 				<b>Date:</b> 1-24-02
2	<b>Full Name Of Inventor</b>	<b>Family Name</b> Kataria	<b>First Given Name</b> Abhay	<b>Second Given Name</b> T.
0	<b>Residence &amp; Citizenship</b>	<b>City</b> Longmont	<b>State or Foreign Country</b> CO	<b>Country of Citizenship</b> USA
1	<b>Post Office Address</b>	<b>Post Office Address</b> 726 Thornwood Way	<b>City</b> Longmont	<b>State &amp; Zip Code/Country</b> CO 80503/USA
<b>Signature of Inventor 202:</b> 				<b>Date:</b> 01/24/2002
2	<b>Full Name Of Inventor</b>	<b>Family Name</b>	<b>First Given Name</b>	<b>Second Given Name</b>
0	<b>Residence &amp; Citizenship</b>	<b>City</b>	<b>State or Foreign Country</b>	<b>Country of Citizenship</b>
4	<b>Post Office Address</b>	<b>Post Office Address</b>	<b>City</b>	<b>State &amp; Zip Code/Country</b>
<b>Signature of Inventor 203:</b>				<b>Date:</b>
2	<b>Full Name Of Inventor</b>	<b>Family Name</b>	<b>First Given Name</b>	<b>Second Given Name</b>
0	<b>Residence &amp; Citizenship</b>	<b>City</b>	<b>State or Foreign Country</b>	<b>Country of Citizenship</b>
4	<b>Post Office Address</b>	<b>Post Office Address</b>	<b>City</b>	<b>State &amp; Zip Code/Country</b>
<b>Signature of Inventor 204:</b>				<b>Date:</b>

#### § 1.56 Duty to disclose information material to patentability.

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information

material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

- (1) prior art cited in search reports of a foreign patent office in a counterpart application, and
- (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

- (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
- (2) It refutes, or is inconsistent with, a position the applicant takes in:
  - (i) Opposing an argument of unpatentability relied on by the Office, or
  - (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

(c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

- (1) Each inventor named in the application;
- (2) Each attorney or agent who prepares or prosecutes the application; and
- (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.

(d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s):	Schaff et al.		
Serial No.:	Unknown	Examiner:	
Filed:	January 24, 2002	Group Art Unit:	Unknown
Title:	IN-SITU DETECTION OF TRANSDUCER MAGNETIC INSTABILITY IN A DISC DRIVE		
Docket:	STL10416/40046.180USU1		

POWER OF ATTORNEY BY ASSIGNEE OF ENTIRE INTEREST  
(REVOCATION OF PRIOR POWERS)

As assignee of record of the entire interest of the above identified application, all powers of attorney previously given are hereby revoked and the following practitioners/patent agents are hereby appointed to prosecute and transact all business in the Patent and Trademark Office connected therewith.

Shawn B. Dempster, Registration No. 34,321	Raghunath S. Minisandram, Registration No. 38,683
Derek J. Berger, Registration No. 45,401	Paul T. Dietz, Registration No. 38,858
Kirk A. Cesari, Registration No. 47,479	Carol I. Bordas, Registration No. 37,284
Mitchell K. McCarthy, Registration No. 38,794	Jennifer M. Buenzow Registration No. P-50,124
David K. Lucente, Registration No. 36,202	

And members of the firm of Merchant & Gould P.C.

Albrecht, John W.	Reg. No. 40,481	Hope, Leonard J.	Reg. No. 44,774
Ali, M. Jeffier	Reg. No. 46,359	Jardine, John S.	Reg. No. P-48,835
Altera, Allan G.	Reg. No. 40,274	Johns, Nicholas P.	Reg. No. 48,995
Anderson, Gregg I.	Reg. No. 28,828	Johnston, Scott W.	Reg. No. 39,721
Batzli, Brian H.	Reg. No. 32,960	Kadievitch, Natalie D.	Reg. No. 34,196
Beard, John L.	Reg. No. 27,612	Kaseburg, Frederick A.	Reg. No. 47,695
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Branch, John W.	Reg. No. 41,633	Keys, Jeramie J.	Reg. No. 42,724
Brown, Jeffrey C.	Reg. No. 41,643	Knearl, Homer L.	Reg. No. 21,197
Bruess, Steven C.	Reg. No. 34,130	Kowalchyk, Alan W.	Reg. No. 31,535
Byrne, Linda M.	Reg. No. 32,404	Kowalchyk, Katherine M.	Reg. No. 36,848
Campbell, Keith	Reg. No. 46,597	Lacy, Paul E.	Reg. No. 38,946
Carlson, Alan G.	Reg. No. 25,959	Larson, James A.	Reg. No. 40,443
Caspers, Philip P.	Reg. No. 33,227	Leonard, Christopher J.	Reg. No. 41,940
Clifford, John A.	Reg. No. 30,247	Liepa, Mura E.	Reg. No. 40,066
Cook, Jeffrey	Reg. No. 48,649	Lindquist, Timothy A.	Reg. No. 40,701
Daignault, Ronald A.	Reg. No. 25,968	Lown, Jean A.	Reg. No. 48,428
Daley, Dennis R.	Reg. No. 34,994	Mayfield, Denise L.	Reg. No. 33,732
Daulton, Julie R.	Reg. No. 36,414	McDonald, Daniel W.	Reg. No. 32,044
DeVries Smith, Katherine M.	Reg. No. 42,157	McIntyre, Jr., William F.	Reg. No. 44,921
DiPietro, Mark J.	Reg. No. 28,707	Mitchem, M. Todd	Reg. No. 40,731
Doscotch, Matthew A.	Reg. No. P-48,957	Mueller, Douglas P.	Reg. No. 30,300
Edell, Robert T.	Reg. No. 20,187	Nelson, Anna M.	Reg. No. 48,935
Epp Ryan, Sandra	Reg. No. 39,667	Paley, Kenneth B.	Reg. No. 38,989
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Goff, Jared S.	Reg. No. 44,716	Pauly, Daniel M.	Reg. No. 40,123
Goggin, Matthew J.	Reg. No. 44,125	Phillips, John B.	Reg. No. 37,206
Golla, Charles E.	Reg. No. 26,896	Pino, Mark J.	Reg. No. 43,858
Gorman, Alan G.	Reg. No. 38,472	Prendergast, Paul	Reg. No. 46,068
Gould, John D.	Reg. No. 18,223	Pytel, Melissa J.	Reg. No. 41,512
Gregson, Richard	Reg. No. 41,804	Qualey, Terry	Reg. No. 25,148
Gresens, John J.	Reg. No. 33,112	Reich, John C.	Reg. No. 37,703
Hamer, Samuel A.	Reg. No. 46,754	Reiland, Earl D.	Reg. No. 25,767
Hamre, Curtis B.	Reg. No. 29,165	Samuels, Lisa A.	Reg. No. 43,080
Harrison, Kevin C.	Reg. No. 46,759	Schmaltz, David G.	Reg. No. 39,828
Hertzberg, Brett A.	Reg. No. 42,660	Schuman, Mark D.	Reg. No. 31,197
Hillson, Randall A.	Reg. No. 31,838	Schumann, Michael D.	Reg. No. 30,422
Holzer, Jr., Richard J.	Reg. No. 42,668	Scull, Timothy B.	Reg. No. 42,137

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Sullivan, Timothy  
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Swenson, Erik G.  
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Underhill, Albert L.  
Vandenburgh, J. Derek  
Wahl, John R.

Reg. No. 33,280  
Reg. No. 40,178  
Reg. No. 45,124  
Reg. No. 47,974  
Reg. No. 43,164  
Reg. No. 47,981  
Reg. No. 29,114  
Reg. No. 45,147  
Reg. No. 32,314  
Reg. No. 38,344  
Reg. No. 42,189  
Reg. No. 27,403  
Reg. No. 32,179  
Reg. No. 33,044

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Young, Thomas  
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Reg. No. 20,890  
Reg. No. 43,261  
Reg. No. 42,222  
Reg. No. P-48,229  
Reg. No. 27,054  
Reg. No. 40,376  
Reg. No. 41,980  
Reg. No. 48,577  
Reg. No. 43,361  
Reg. No. 25,796  
Reg. No. 45,255

CHANGE OF ATTORNEY'S/AGENT'S ADDRESS IN APPLICATION

Merchant & Gould P.C.  
P.O. Box 2903  
Minneapolis, MN 55402-0903

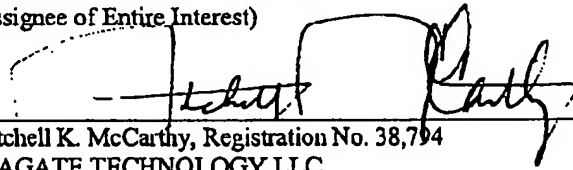
STATEMENT UNDER 37 CFR 3.73(b)

Seagate Technology LLC states that it is the Assignee of Entire Interest in the patent application/patent identified above by virtue of an Assignment from the inventor(s) of the patent application/patent identified above. A copy of the Assignment is attached and/or was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_. The undersigned (whose title is supplied below) is empowered to sign this statement on behalf of the Assignee.

Respectfully submitted,

SEAGATE TECHNOLOGY LLC  
(Assignee of Entire Interest)

1/24/2002  
Date

  
Mitchell K. McCarthy, Registration No. 38,794  
SEAGATE TECHNOLOGY LLC  
Mail Stop: OKM280  
10321 W. Reno  
Oklahoma City, OK 73127  
405.577.7239

204270-42507

RECORDATION FORM COVER SHEET  
PATENTS ONLYU.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

To the Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

## 1. Name of conveying party(ies):

Michael D. Schaff  
Abhay T. Kataria

## 2. Name and address of receiving party(ies):

Seagate Technology LLC  
920 Disc Drive  
Scotts Valley, California 95067Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ NoAdditional name(s) & address(es) attached? ☐ Yes ☒ No

## 3. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other:

Execution Date: January 24, 2002

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: January 24, 2002

## A. Patent Application No.(s)

## B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: John R. Wahl, Esq.  
Address: Merchant & Gould P.C.  
P.O. Box 2903  
Minneapolis, MN 55402-0903

6. Total number of applications and patents involved: 1
7. Total fee (37 CFR 3.41): \$ 40.00  
☒ Enclosed  
☐ Authorized to be charged to deposit account
8. Please charge any additional fees or credit any overpayments to our Deposit account number: 13-2725

DO NOT USE THIS SPACE

## 9. Statement and signature:

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

John R. Wahl

Name of Person Signing

Signature

January 24, 2002

Date

Total number of pages including cover sheet, attachments, and document: 5

Do not detach this portion

Mail documents to be recorded with required cover sheet information to:

Box Assignments  
Director - U.S. Patent and Trademark Office  
Washington, D.C. 20231

Public burden reporting for this sample cover sheet is estimated to average about 30 minutes per document to be recorded, including time for reviewing the document and gathering the data needed, and completing and reviewing the sample cover sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Office of information systems, PK2-1000C, Washington, D.C. 20231, and to the Office of Management and Budget, Paperwork Reduction Project (0651-0011), Washington, D.C. 20503.

ASSIGNMENT

WHEREAS, we, Michael D. Schaff, residing at 2115 Sand Dollar Circle, Longmont, CO 80503, ; Abhay T. Kataria residing at 726 Thornwood Way, Longmont, CO 80503, are the inventors of an invention entitled IN-SITU DETECTION OF TRANSDUCER MAGNETIC INSTABILITY IN A DISC DRIVE that is the subject matter of

☒ a provisional application for Letters Patent which is identifiable in the United States Patent and Trademark Office by Serial No. 60/311,136, filed August 9, 2001;

☒ an application for Letters Patent, the application having been executed on even date herewith, and/or being identifiable in the United States Patent and Trademark Office by Serial No. \_\_\_\_\_, filed \_\_\_\_\_; and

☐ an international application for Letters Patent filed pursuant to the Patent Cooperation Treaty which is identifiable in the United States Receiving office by Application No. \_\_\_\_\_, filed on \_\_\_\_\_; and

WHEREAS, Seagate Technology LLC, a limited liability company organized and existing under and by virtue of the laws of the State of Delaware and the United States of America, and having offices at 920 Disc Drive, Scotts Valley, California 95067 (hereinafter "Assignee"), is desirous of acquiring the entire right, title and interest in and to the invention, the applications, and any and all Letters Patent or similar foreign or domestic legal protection;

NOW THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, we transfer to Assignee, its successors and assigns, our entire right, title and interest in and to the invention, the above-identified applications, all provisional applications from which any of the above-identified applications claim priority, corresponding domestic and foreign applications, any continuation, division, renewal, or substitute for the applications, all Letters Patent, any reissue, re-examination, or similar legal protection issuing related to the Letters Patent, and all rights and benefits under any applicable treaty or convention; and we authorize the Director of the United States Patent and Trademark Office or foreign equivalent to issue the Letters Patent or similar legal protection to the Assignee.

We authorize the Assignee, its successors and assigns, to insert in this instrument the filing date(s) and serial numbers of the application when ascertained. We further authorize the Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters

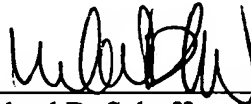
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Patent or similar legal protection, in its own name if desired, in any and all foreign countries and appoint Assignee the common representative in the above-identified international application and any international application for the invention.

We represent to the Assignee, its successors and assigns, that we have not and shall not execute any writing or do any act whatsoever conflicting with this Assignment. We and our executors or administrators will at any time upon request, without additional consideration, but at the expense of the Assignee, its successors and assigns, execute and deliver to Assignee or its legal representatives such additional writings and do such additional acts as the Assignee, its successors and assigns, may deem desirable to perfect its enjoyment of this grant, and render all assistance in making application for and obtaining, maintaining, and enforcing the letters Patent or similar legal protection on the invention in any and all countries, including without limitation providing testimony in any related interference litigation or proceeding.

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of

Jan. 24, 2002



Michael D. Schaff

STATE OF Colorado )  
 )ss:  
COUNTY OF Boulder )

On this 24<sup>th</sup> day of January, 2002, before me personally appeared Michael D. Schaff to me known to be the person described in, and who executed the foregoing instrument, and acknowledged to me that he/she executed the same for the uses and purposes therein set forth.

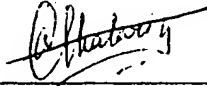
[SEAL]

Notary Public

  
My commission expires 12/30/2003



IN TESTIMONY WHEREOF, I have hereunto set my hand this 24 day of  
January, 2001-2002.

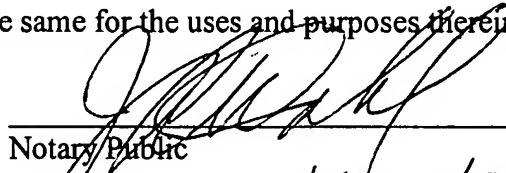


Abhay T. Kataria

STATE OF Colorado )  
COUNTY OF Boulder )ss:

On this 24<sup>th</sup> day of January, 2002, before me personally appeared Abhay T. Kataria to me known to be the person described in, and who executed the foregoing instrument, and acknowledged to me that he/she executed the same for the uses and purposes therein set forth.

[SEAL]

  
Notary Public

Commission expires 12/30/2003